

## ***ABSTRACT***

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*The uncontrolled use of petroleum fuel in transportation vehicles causes the supply of petroleum reserves to dwindle. One effort to overcome this is the use of electrical energy in electric cars. This study aims to analyze the power consumption of electric cars that use a 2000 W BLDC electric motor. The method used is an experimental method with direct tests using one and two passenger electric cars weighing 52 kg and 76 kg. The test was carried out at Siliwangi University with a 150 meter long car track. The results of the research show that there are differences in speed and output current and voltage generated when the car is given two different weights. The load on the electric car affects the performance at the speed of the electric car and affects the power consumed. The greater the load carried by an electric car, the greater the current and the smaller the resulting speed. The speed achieved by the electric car in each test cannot reach the specified speed of 60km/hour..*

***Keyword:*** *Electric Car, BLDC Motor, Electric Car Performance*